UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

20350

7590

11/14/2008

TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834 EXAMINER

ARJOMANDI, NOOSHA

ART UNIT PAPER NUMBER

2167

DATE MAILED: 11/14/2008

1	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/688,329	10/17/2003	Shoji Kodama	16869B-081000US	2311

TITLE OF INVENTION: METHOD AND APPARATUS FOR FILE REPLICATION WITH A COMMON FORMAT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/17/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ap in m

appropriate. All further correindicated unless corrected be maintenance fee notifications	espondence includin elow or directed oth	g the Patent, advance of erwise in Block 1, by (a	rders and notification of a specifying a new corre	maintenance fees wi spondence address;	Ill be mailed to the current and/or (b) indicating a sep	t correspondence address as parate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				(s) Transmittal, This	certificate cannot be used	or domestic mailings of the for any other accompanying ent or formal drawing, must	
20350 759	2008	hav		_			
TOWNSEND AN TWO EMBARCAD EIGHTH FLOOR	DERO CENTER		Stat	Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.			
SAN FRANCISCO,	, CA 94111-3834	ļ				(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/688,329	10/17/2003	•	Shoji Kodama		16869B-081000US	2311	
TITLE OF INVENTION: ME							
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S) DUE	E DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0 •	\$1810	02/17/2009	
EXAMINE	R	ART UNIT	CLASS-SUBCLASS]			
ARJOMANDI, N		2167	707-009000				
1. Change of correspondence CFR 1.363). Change of corresponde Address form PTO/SB/122		`	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a				
"Fee Address" indication PTO/SB/47; Rev 03-02 or Number is required.			registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
3. ASSIGNEE NAME AND			4 ,	. /			
recordation as set forth in	37 CFR 3.11. Comp	fied below, no assignee letion of this form is NO	e data will appear on the patent. If an assignee is identified below, the document has been filed for DT a substitute for filing an assignment.				
(A) NAME OF ASSIGNE	£		(B) RESIDENCE: (CITY	and STATE OR CO	JUNTRY)		
Please check the appropriate a	assignee category or	categories (will not be pr	rinted on the patent):	Individual 🗖 Cor	poration or other private gr	roup entity 🚨 Government	
4a. The following fee(s) are s	ubmitted:	41	— ;	ase first reapply any	y previously paid issue fee	shown above)	
☐ Issue Fee ☐ Publication Fee (No sn	nall entity discount p	ermitted)	☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached.				
Advance Order - # of Copies			The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number				
5. Change in Entity Status (a. Applicant claims SM	IALL ENTITY statu	s. See 37 CFR 1.27.			L ENTITY status. See 37 C		
NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.							
Authorized Signature				Date			
Typed or printed name				Registration No	0		
This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.							



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,329	10/17/2003	Shoji Kodama	16869B-081000US	2311
20350 75	90 11/14/2008		EXAM	INER
TOWNSEND AN	ND TOWNSEND AN	ARJOMANDI, NOOSHA		
TWO EMBARCA	DERO CENTER	ART UNIT	PAPER NUMBER	
EIGHTH FLOOR SAN FRANCISCO) CA 0/111 393/		2167	
SANTKANCISCO), CA 94111-3634		DATE MAILED: 11/14/200	8

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 965 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 965 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	10/688,329	KODAMA, SHOJI	
Notice of Allowability	Examiner	Art Unit	
	Noosha Arjomandi	2167	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	pears on the cover sheet will G (OR REMAINS) CLOSED in or other appropriate community or other appropriate sheet SIGHTS. This application is sometimes and MPEP 1308.	n this application. If not included unication will be mailed in due course	
1. This communication is responsive to <u>September 11, 2008</u>	3.		
2. X The allowed claim(s) is/are <u>1-2, 5, 7, 9-15, 17, and19-40 (</u>	<u>renumbered as 1-34)</u> .		
 Acknowledgment is made of a claim for foreign priority of a) All b) Some* c) None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have Horizontal Bureau (PCT Rule 17.2(a)). 	e been received. e been received in Applicatio	on No	om the
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirem	nents
4. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which give			E OF
5. CORRECTED DRAWINGS (as "replacement sheets") mu	ist be submitted.		
(a) 🔲 including changes required by the Notice of Draftsper	son's Patent Drawing Review	v (PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	<u>.</u> .		
(b) ☐ including changes required by the attached Examiner Paper No./Mail Date			
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in			of
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT 			ne
Attachment(s)	_		
1. Notice of References Cited (PTO-892)	_	formal Patent Application	
 Notice of Draftperson's Patent Drawing Review (PTO-948) 	Paper No.	ummary (PTO-413), Mail Date	
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 	7. ⊠ Examiner's	Amendment/Comment	
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's	Statement of Reasons for Allowance	е
····· y ······	9. 🔲 Other		
/Noosha Arjomandi/	/John R. Cottin	gham/	
Examiner, Art Unit 2167	Supervisory Pa	tent Examiner, Art Unit 2167	

DETAILED ACTION

1. This office action is in response to the amendment filed on September 11, 2008, in which claims 1-20 are presented for further examination.

Response to Arguments

2. Applicant's arguments filed on September 11, 2008, with respect to claims 1-2, 5-17, 19-40 have been fully considered and are persuasive. The rejection of last office action has been withdrawn.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with George B. F. Yee Reg. No. (37,478) on October 22, 2008.

The application has been amended as follows:

In the claims:

A method for accessing files in a file server comprising:
 receiving a file request in connection with a file;

Page 3

performing one or more first operations on a first file system in response to the file request, wherein the one or more first file operations are performed on a copy of the file contained in the first file system;

creating a copy of the file on the second file system having a filename the same as the file when the file has not been copied to a second file system different from the first file system, and creating a copy of the file on the second file system having a filename different from the file when the file has been copied to the second file system;

selectively performing one or more second operations on the second file system in response to the file request when the file request includes a write-type operation on the file and is queued up in a list of operations to be performed on the second file system, wherein the list of operations comprise operations from previous file requests, wherein the one or more first operations are performed asynchronously with respect to the one or more second operations, and wherein the one or more second operations are performed on the copy of the file contained in the second file system; and

accessing files on the first file system <u>by a first client system</u> only via the file server and accessing files on the second file system directly <u>by a second client system via a block interface</u> <u>absent of the file server</u>, wherein a format of the first file system is different from a format of the second file system.

5. The method of claim 4-1 wherein each file contained in the second file system comprises one or more blocks of physical storage allocated in sequential order.

Art Unit: 2167

6. Cancelled

7. The method of claim 6-1 wherein the step of performing one or more second operations is

performed only after completing the step of performing one or more first operations.

8. Cancelled

10. A method for accessing files on a file server comprising:

receiving a request for a first operation on a file, the request including a file reference;

performing the first operation on a first file in a first file system, the first file being

identified by the file reference;

storing information representative of the first operation and of the file reference in an

entry of a queue;

creating a copy of the file on the second file system having a filename the same as the file

when the file has not been copied to a second file system different from the first file system, and

creating a copy of the file on the second file system having a filename different from the file

when the file has been copied to the second file system; and

selectively performing one or more second operations on the second file system in response to

the file request when the file request includes a write-type operation on the file and is queued up

in a list of operations to be performed on the second file system, wherein the list of operations

comprise operations from previous file requests, wherein the one or more first operations are

performed asynchronously with respect to the one or more second operations, and wherein the

Art Unit: 2167

one or more second operations are performed on the copy of the file contained in the second file system; and

accessing files on the first file system <u>by a first client system only</u> via the file server and accessing files on the second file system directly <u>by a second client system via a block interface</u> <u>absent of the file server</u>, wherein a format of the first file system is different from a format of the second file system.

16. Cancelled.

17. A method for operating a file server comprising:

receiving a file request;

communicating one or more first file operations to a first file system to perform the file request on a file in the first file system, the file being identified in the file request;

creating a copy of the file on the second file system having a filename the same as the file when the file has not been copied to a second file system different from the first file system, and creating a copy of the file on the second file system having a filename different from the file when the file has been copied to the second file system;

determining if the file request is a write-type of request, when a determination is made that the file request is a write-type of request, communicating one or more second file operations to the second file system to perform the file request on a file in the second file system after the file request on the first file system has completed; and

accessing files on the first file system <u>by a first client system</u> only via the file server and accessing files on the second file system directly <u>by a second client system via</u>

Art Unit: 2167

<u>a block interface absent of</u> the file server, wherein a format of the first file system is different from a format of the second file system and <u>wherein the one or more first file</u> operations are performed asynchronously with respect to the one or more second filed operations.

18. Cancelled

20. A method for accessing files in a file server comprising:

providing a first file system and a second file system, the second file system comprising files contained in the first file system, the first file system having a file system format that is different from a file system format of the second file system;

receiving a file request;

performing one or more first operations on a file stored in the first file system; creating a copy of the file having the same filename as the file when the file has not been copied to the second file system when the file request is a close file operation, and creating a copy of the file having a different filename from the file when the file has been copied to the second file system, the copy being stored in the second file system, and

accessing files on the first file system by a first client system only via the file server and accessing files on the second file system directly by a second client system via a block interface absent of the file server, wherein a format of the first file system is different from a format of the second file system and wherein the one or more first file

Art Unit: 2167

operations are performed asynchronously with respect to the one or more second filed operations.

23. A file server comprising:

a data processing component;

a communication component configured to receive file requests; and

a physical storage component in data communication with the data processing component comprising a first physical storage portion and a second physical storage portion, wherein the first physical storage portion containing files organized in a first file system, and the second physical storage portion containing files organized in a second file system, the first file system having a format different from the second file system, wherein the second file system comprises one or more files contained in the first file system, the data processing component comprising first file system software for accessing the first file system and second file system software for accessing the second file system,

performing first file requests in connection with a file made on the first file system,

creating a copy of the file on a second file system having a filename the same as the file when the file has not been copied to the second file system different from the first file system, otherwise and creating a copy of the file on the second file system having a filename different from the file when the file has been copied to the second file system

Art Unit: 2167

different from the first file system, and configured to perform at least some of the first file requests on the second file system; and

accessing files on the first file system by a first client system only via the file server and accessing files on the second file system directly by a second client system via a block interface absent of the file server, wherein a format of the first file system is different from a format of the second file system and wherein the one or more first file operations are performed asynchronously with respect to the one or more second filed operations.

33. An application server comprising:

a data processing component for executing one or more applications;

file access software configured to access a first file system and a second file system that is different from the first file system;

a physical storage component comprising first physical storage for files contained in the first file system, the physical storage component further comprising second physical storage for files contained in the second file system;

receiving file requests in connection with a file from the one or more applications and performs the file requests on the first file system and selectively performing the file requests on the second file system,

creating a copy of the file on the second file system having a filename the same as the file when the file has not been copied to a second file system different from the first file system, and creating a copy of the file on the second file system having a filename different from the file when the file has been copied to the second file system and

Page 9

accessing files on the first file system by a first client system only via the file server and accessing files on the second file system directly by a second client system via a block interface absent of the file server, wherein a format of the first file system is different from a format of the second file system and wherein the one or more first file operations are performed asynchronously with respect to the one or more second filed operations.

37. file server comprising:

means for receiving file requests;

means for performing the file requests on a first file system, including means for communicating with the first file system; and

means for selectively performing the file requests on a second file system, including means for communicating with the second file system, the second file system having a format different from the first file system,

means for creating a copy of the file on the second file system having a filename the same as the file wherein when a file associated with a first file request on the first file system has not been copied to the second file system;

Art Unit: 2167

means for creating a copy of the file on the second file system having a filename different from the file when the file has been copied to the second file system; and

means for accessing files on the first file system by a first client system only via the file server and accessing files on the second file system directly by a second client system via a block interface absent of the file server, wherein a format of the first file system is different from a format of the second file system and wherein the one or more first file operations are performed asynchronously with respect to the one or more second filed operations.

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance: Upon searching a variety of databases, the examiner respectfully submits that "wherein files on the first file system are accessed by a first client system_only via the file server and files on the second file system are accessed directly by a second client system via a block interface absent of the file server, and wherein a format of the first file system is different from a format of the second file system, wherein the step of performing one or more second operations is performed when the file request includes a write-type operation on the file, wherein the step of performing one or more second operations is queued up in a list of operations to be performed on the second file system, wherein the list of operations comprise operations from previous file requests, wherein the one or more first operations are performed asynchronously with respect to the one or more second operations." in conjunction with all other limitations of the dependent and independent claims are not taught nor suggested by the prior art of record (PTO-892 and 1449). Therefore, all

Art Unit: 2167

pending claims 1-2, 5, 7, 9-15, 17, and 19-40 are hereby allowed. These features, in conjunction with all other limitations of the dependent and independent claims, render claims 1-2, 5, 7, 9-15, 17, and 19-40 (renumbered as 1-34) allowable. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has

been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to

Application/Control Number: 10/688,329

Art Unit: 2167

view the scanned images of their own application file folder(s) as well as general patent

information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199. The

USPTO's official fax number is 571-272-8300.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Noosha Arjomandi, whose telephone number is (571) 272-9784. The

examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John

Cottingham, can be reached on (571) 272-7079.

October 24, 2008

/Noosha Arjomandi/

Art Unit 2167

Page 12

/John R. Cottingham/

Supervisory Patent Examiner, Art Unit 2167